EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	3	"60222450"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/15 09:00
L2	88	"5663396"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/15 09:01
L3	2	"5663396".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/15 09:02
L4	2	"5633396".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/15 09:16
L5	269	560/347.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/15 09:35
L6	109	lysine adj triisocyanate	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/15 09:17
L7	0	l5 and l6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/15 09:17
L8	59360	activated adj carbon	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/15 09:17
L9	0	l6 and l8	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/15 09:17
L10	30353	phosgene or COCl2	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/15 09:35
L11	161	l5 and l10	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/15 09:35

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NEWS 5	DEC 14	2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
NEWS 6	DEC 14	CA/CAplus to be enhanced with updated IPC codes
NEWS 7	DEC 21	IPC search and display fields enhanced in CA/CAplus with the IPC reform
NEWS 8	DEC 23	New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/ USPAT2
NEWS 9	JAN 13	IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 10	JAN 13	New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to INPADOC
NEWS 11	JAN 17	Pre-1988 INPI data added to MARPAT
NEWS 12	JAN 17	IPC 8 in the WPI family of databases including WPIFV
NEWS 13	JAN 30	Saved answer limit increased
NEWS 14	JAN 31	Monthly current-awareness alert (SDI) frequency added to TULSA
NEWS 15	FEB 21	STN AnaVist, Version 1.1, lets you share your STN AnaVist visualization results
NEWS 16	FEB 22	Status of current WO (PCT) information on STN
NEWS 17	FEB 22	The IPC thesaurus added to additional patent databases on STN
NEWS 18	FEB 22	Updates in EPFULL; IPC 8 enhancements added
NEWS 19	FEB 27	New STN AnaVist pricing effective March 1, 2006
NEWS 20	FEB 28	MEDLINE/LMEDLINE reload improves functionality
NEWS 21	FEB 28	TOXCENTER reloaded with enhancements
NEWS 22	FEB 28	REGISTRY/ZREGISTRY enhanced with more experimental spectral property data
NEWS 23	MAR 01	INSPEC reloaded and enhanced
NEWS 24	MAR 03	Updates in PATDPA; addition of IPC 8 data without attributes
NEWS 25	MAR 08	X.25 communication option no longer available after June 2006

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
http://download.cas.org/express/v8.0-Discover/

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 07:39:58 ON 15 MAR 2006

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 07:40:09 ON 15 MAR 2006
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 MAR 2006 HIGHEST RN 876655-59-3
DICTIONARY FILE UPDATES: 13 MAR 2006 HIGHEST RN 876655-59-3

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TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

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*                                                                    *
* The CA roles and document type information have been removed from *
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* available and contains the CA role and document type information. *
*                                                                    *
**********************************************************************
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Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> e lysine triisocyanate/cn

E1	1	LYSINE TRANSPORTER (SHIGELLA BOYDII STRAIN K-694 GENE LYSP FRAGMENT)/CN
E2	1	LYSINE TRANSPORTERS/CN
E3	1 -->	LYSINE TRIISOCYANATE/CN
E4	1	LYSINE TRIISOCYANATE-DURANATE TPA 100-HITALOID 3083-70B COPOLYMER/CN
E5	1	LYSINE TRIISOCYANATE-STYRENE BLOCK COPOLYMER/CN
E6	1	LYSINE TRNA SYNTHETASE (CITROBACTER FREUNDII STRAIN BALLERUP -7851 GENE LYSU)/CN
E7	1	LYSINE TRNA SYNTHETASE (ESCHERICHIA COLI STRAIN O157:H7 GENE

```
                    ECS5111)/CN
E8          1       LYSINE TRNA SYNTHETASE (SHIGELLA FLEXNERI STRAIN 2457T GENE
                    LYSS)/CN
E9          1       LYSINE TRNA SYNTHETASE (YERSINIA PESTIS STRAIN KIM GENE LYSS
                    )/CN
E10         1       LYSINE TRNA SYNTHETASE, CONSTITUTIVE (SALMONELLA ENTERICA EN
                    TERICA CHOLERAESUIS STRAIN SC-B67 GENE LYSS)/CN
E11         1       LYSINE TRNA SYNTHETASE, CONSTITUTIVE (SALMONELLA ENTERICA TY
                    PHIMURIUM STRAIN LT2; SGSC 1412; ATCC 700720 GENE LYSS)/CN
E12         1       LYSINE TRNA SYNTHETASE, CONSTITUTIVE (SHIGELLA BOYDII STRAIN
                     SB227 GENE LYSS)/CN

=> e3
L1          1 "LYSINE TRIISOCYANATE"/CN

=> d l1

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   77704-50-8  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Hexanoic acid, 2,6-diisocyanato-, 2-isocyanatoethyl ester, (2S)- (9CI)
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Hexanoic acid, 2,6-diisocyanato-, 2-isocyanatoethyl ester, (S)-
OTHER NAMES:
CN   Lysine triisocyanate
FS   STEREOSEARCH
MF   C11 H13 N3 O5
CI   COM
LC   STN Files:   CA, CAPLUS, CASREACT, CIN, PIRA, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.
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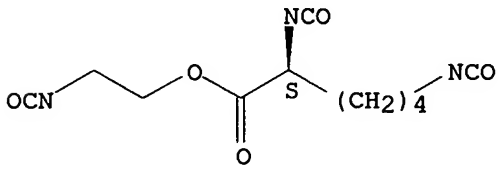


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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

             28 REFERENCES IN FILE CA (1907 TO DATE)
             14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             28 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> file caplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   8.42       8.63

FILE 'CAPLUS' ENTERED AT 07:42:27 ON 15 MAR 2006
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FILE LAST UPDATED: 14 Mar 2006 (20060314/ED)

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=> l1
L2 28 L1

=> save temp l2 lystriiso/a
ANSWER SET L2 HAS BEEN SAVED AS 'LYSTRIISO/A'

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.92	9.55

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 07:43:27 ON 15 MAR 2006

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LOGINID:SSSPTA1623PAZ

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* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 08:29:58 ON 15 MAR 2006
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.92	9.55

=> d his

(FILE 'HOME' ENTERED AT 07:39:58 ON 15 MAR 2006)

FILE 'REGISTRY' ENTERED AT 07:40:09 ON 15 MAR 2006
E LYSINE TRIISOCYANATE/CN
L1 1 E3

FILE 'CAPLUS' ENTERED AT 07:42:27 ON 15 MAR 2006
L2 28 L1
SAVE TEMP L2 LYSTRIISO/A

=> carbon
1177471 CARBON
25740 CARBONS

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L3      1186698 CARBON
                (CARBON OR CARBONS)

=> l2 and l3
L4            3 L2 AND L3

=> d l4 1-3 ti

L4   ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Fluoropolymers, their manufacture, their compositions, their coatings and
     varnish with high gloss and hardness and good water and oil resistance,
     and laminates coated with them

L4   ANSWER 2 OF 3  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Moisture-curable urethane compositions with low foaming and good adhesion
     to substrate surface without the needs for a primer

L4   ANSWER 3 OF 3  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   One-liquid moisture-curable polyurethane compositions with good adhesion
     and curability


=> activatred carbon
             3 ACTIVATRED
       1177471 CARBON
         25740 CARBONS
       1186698 CARBON
                (CARBON OR CARBONS)
L5           0 ACTIVATRED CARBON
                (ACTIVATRED(W)CARBON)

=> activated carbon
'CARBON' MUST END IN '/Q', '/A', '/L', '/S', OR '/B'
The name of a saved query (or structure or screen set) ends in '/Q'.
The name of a saved answer set ends in '/A'.  The name of a saved L#
list ends in '/L'.  The name of an SDI request ends in '/S'.  The name
of a BATCH search request ends in '/B'.  You must enter the /Q, /A,
/L, /S, or /B at the end of the name.
ENTER NAME OF SAVED ITEM TO ACTIVATE OR (END):end

=> search activated carbon
        485902 ACTIVATED
       1177471 CARBON
         25740 CARBONS
       1186698 CARBON
                (CARBON OR CARBONS)
L6       45301 ACTIVATED CARBON
                (ACTIVATED(W)CARBON)

=> l2 and l6
L7           0 L2 AND L6

=> d l4 1-3 ti fbib abs

L4   ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Fluoropolymers, their manufacture, their compositions, their coatings and
     varnish with high gloss and hardness and good water and oil resistance,
     and laminates coated with them
AN   2005:275812  CAPLUS
DN   142:337900
TI   Fluoropolymers, their manufacture, their compositions, their coatings and
     varnish with high gloss and hardness and good water and oil resistance,
     and laminates coated with them
```

IN Kimura, Sachiyo; Matsuda, Yoshitaka; Obayashi, Nobuo; Katayama, Mitsuhiro
PA Kanto Denka Kogyo Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005082719	A2	20050331	JP 2003-317088	20030909
			JP 2003-317088	20030909

AB The fluoropolymers comprise fluoroolefins, perfluoroalkyl-containing monomers, OH-containing unsatd. monomers, dicyclopentanyl- and/or dicyclopentenyl-containing (meth)acrylates, and optionally reactive siloxanes. Thus, dicyclopentanyl methacrylate-hydroxybutylvinyl ether-Me methacrylate-2-perfluorooctylethyl methacrylate-tetrafluoroethylene copolymer was reacted with lysine triisocyanate to give a coating layer showing 60° gloss 89, pencil hardness (JIS K 5600) 2H, and good adhesion between the layers.

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
TI Moisture-curable urethane compositions with low foaming and good adhesion to substrate surface without the needs for a primer
AN 2001:910277 CAPLUS
DN 136:54557
TI Moisture-curable urethane compositions with low foaming and good adhesion to substrate surface without the needs for a primer
IN Araki, Kiminori; Miyata, Akihiro; Ishikawa, Kazunori
PA Yokohama Rubber Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001348416	A2	20011218	JP 2000-170754	20000607
			JP 2000-170754	20000607

OS MARPAT 136:54557
AB The compns. useful for adhesives, sealants, etc., comprise (A) urethane prepolymers, (B) the silane compds. either derived from the reaction of an adduct of diisocyanate compound and a compound bearing ≥3 reactive H's or a lysine isocyanate bearing 2 or 3 NCO groups with secondary aminoalkoxysilane compound bearing N-substituted benzene ring or its derivative, (C) tertiary amine catalysts bearing morpholino structure or/and dimethylamino structure and (D) organotin compound Thus, preparing a urethane prepolymer (A) from a polyoxypropylene diol (mol. weight 2000) 500, a polyoxypropylene triol (mol. weight 5000) 750 and MDI 214, sep. preparing an addition reaction product (B) of Takenate D 110N (polyisocyanate) 150 and Y 9669 (3-phenylaminopropyltrimethoxysilane) 18 g, and mixing the A 100 with the B 8.7, BL 19 (tert-amine catalyst) 0.05, dioctyltin dilaurate 0.02, Ph3P 0.1 and **carbon** black 102 parts gave a moisture-curable urethane composition forming good bonding to metal and glass surfaces.

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
TI One-liquid moisture-curable polyurethane compositions with good adhesion and curability
AN 2000:302165 CAPLUS
DN 132:323106
TI One-liquid moisture-curable polyurethane compositions with good adhesion and curability
IN Miyata, Akihiro; Ishikawa, Kazunori; Araki, Kiminori

PA Yokohama Rubber Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	JP 2000128949	A2	20000509	JP 1998-316211		19981106
	JP 3263034	B2	20020304			
				JP 1997-310396	A	19971112
				JP 1998-235194	A	19980821
	US 6133395	A	20001017	US 1998-189622		19981110
				JP 1997-310396	A	19971112
				JP 1998-235194	A	19980821
				JP 1998-316211	A	19981106

AB The compns., useful for sealants, etc., comprise urethane prepolymers and silane compds. having average ≥1.5 NCO groups and average ≥1.5 hydrolyzable alkoxy groups in a mol. selected from (A) reaction products of polyol (mol. weight ≤500)-diisocyanate adducts having ≥3 NCO groups with secondary amino alkoxysilanes and (B) adducts of secondary amino alkoxysilanes and lysine isocyanates containing 2-3 NCO groups. Thus, 336 g trimethylolpropane-HDI (1:3) adduct (Coronate HL) was treated with 87 g 3-phenylaminopropyltrimethoxysilane (Y 9669) to give an adduct (NCO 2.00 and hydrolyzable alkoxy group 3.00/mol.), 6.6 g of which was mixed with 100 g polyoxypropylene diol-polyoxypropylene triol-MDI copolymer, **carbon** black, and dioctyltin dilaurate to give a composition, showing good curability at 20° and relative humidity 65%, adhesion to glass and steel plates, strength and elongation for the cured product, and no foaming in curing.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	22.64	31.27

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.25	-2.25

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SESSION RESUMED IN FILE 'CAPLUS' AT 08:35:46 ON 15 MAR 2006
FILE 'CAPLUS' ENTERED AT 08:35:46 ON 15 MAR 2006

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	22.64	31.27

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CA SUBSCRIBER PRICE -2.25 -2.25

=> l1/prep
28 L1
3437698 PREP/RL
L8 18 L1/PREP
(L1 (L) PREP/RL)

=> phosgene
12980 PHOSGENE
40 PHOSGENES
L9 12991 PHOSGENE
(PHOSGENE OR PHOSGENES)

=> l8 and l9
L10 2 L8 AND L9

=> d l10 1-2 ti fbib abs

L10 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
TI Preparation of lysine ester triisocyanates without discoloration
AN 2002:23511 CAPLUS
DN 136:69598
TI Preparation of lysine ester triisocyanates without discoloration
IN Matsuoka, Toshihiro; Kato, Shigeaki; Matsushita, Seishiro; Fukuda, Yukitoshi
PA Kyowa Oil and Fat Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002003462	A2	20020109	JP 2000-183940	20000620
			JP 2000-183940	20000620

OS CASREACT 136:69598; MARPAT 136:69598
AB The compds. OCN(CH2)4CH(NCO)CO2RNCO (R = alkyl) are prepared by reaction of H2N(CH2)4CH(NH2)CO2RNH2 (R = alkylene) or their salts with **phosgene**, treatment of the reaction mixture with activated C or metal halides, and distillation Lysine β-aminoethyl ester trihydrochloride was reacted with **phosgene** in o-dichlorobenzene at 130° for 12 h, treated with activated C (Shirasagi P), and distilled to give lysine diisocyanate β-isocyanatoethyl ester with 99% purity and APHA 20.

L10 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
TI Lysine ester triisocyanates
AN 1986:406815 CAPLUS
DN 105:6815
TI Lysine ester triisocyanates
IN Aiga, Makoto; Torisu, Yasuyoshi; Samejima, Muneyasu; Ajioka, Masanobu
PA Mitsui Toatsu Chemicals, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 60222450	A2	19851107	JP 1984-78653	19840420

JP 04066863 B4 19921026
JP 1984-78653 19840420

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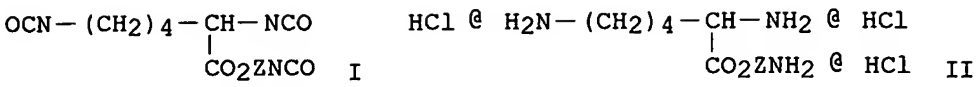

AB Lysine ester triisocyanates I (Z = alkylene) containing controlled amts. of coloring substances useful for paints were prepared by treating anhydrous lysine monoalkyl ester trihydrochloride (II) with **phosgene** in an unreactive organic solvent, removing the solvent and tarry matters, heating at 100-200°, and distilling Thus, 111.1 g of a moist mass containing 80% lysine β-aminoethyl ester trihydrochloride (II; Z = C2H4) (III), 10% MeOH, and 10% H2O was mixed with 600 g o-dichlorobenzene (IV) in a mixer 20 min at 200 rpm, filtered, and the filter cake was washed with 600 g IV to give III containing 180 ppm H2O, which in 600 g IV was treated with **phosgene** (**phosgene**: amide = 3:1) 10 h at 140° followed by thin film distillation at 180-220°. The reaction mixture was heated 30 min at 180° under N and then distilled at 180-220° and 0.5 mm Hg to give 88.3% lysine diisocyanate β-isocyanatoethyl ester (I; Z = C2H4) of 99.5% purity and APHA 50.

=>
=> d l8 15-18 ti

L8 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Flexible yellowing-free polyurethane resin for coatings with good chip, scuff, and impact resistance

L8 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Lysine ester triisocyanates

L8 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Purification of organic isocyanates

L8 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Polyurethane resins and polyurethane resin coating compositions

=> d l8 16, 17 ti fbib abs

L8 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Lysine ester triisocyanates
AN 1986:406815 CAPLUS
DN 105:6815
TI Lysine ester triisocyanates
IN Aiga, Makoto; Torisu, Yasuyoshi; Samejima, Muneyasu; Ajioka, Masanobu
PA Mitsui Toatsu Chemicals, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	JP 04066863	B4	19921026	JP 1984-78653	19840420

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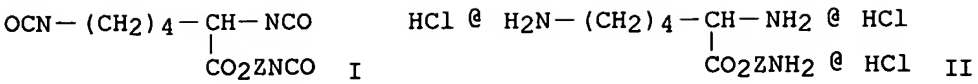

AB Lysine ester triisocyanates I (Z = alkylene) containing controlled amts. of coloring substances useful for paints were prepared by treating anhydrous lysine monoalkyl ester trihydrochloride (II) with phosgene in an unreactive organic solvent, removing the solvent and tarry matters, heating at 100-200°, and distilling Thus, 111.1 g of a moist mass containing 80% lysine β-aminoethyl ester trihydrochloride (II; Z = C2H4) (III), 10% MeOH, and 10% H2O was mixed with 600 g o-dichlorobenzene (IV) in a mixer 20 min at 200 rpm, filtered, and the filter cake was washed with 600 g IV to give III containing 180 ppm H2O, which in 600 g IV was treated with phosgene (phosgene: amide = 3:1) 10 h at 140° followed by thin film distillation at 180-220°. The reaction mixture was heated 30 min at 180° under N and then distilled at 180-220° and 0.5 mm Hg to give 88.3% lysine diisocyanate β-isocyanatoethyl ester (I; Z = C2H4) of 99.5% purity and APHA 50.

L8 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Purification of organic isocyanates
AN 1985:455701 CAPLUS
DN 103:55701
TI Purification of organic isocyanates
PA Mitsui Toatsu Chemicals, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60054349	A2	19850328	JP 1983-161890	19830905
				JP 1983-161890	19830905

AB The diisocyanate (I) [77704-50-8] (95% purity) prepared by the phosgenation of lysine 2-aminoethyl ester with COCl2 was added (149.7 g) with 35 g heat transfer medium (Nuray N-165 AH) to a thin-film evaporator (224 and 51 g/h, resp.) at 190-210° (wall temperature)/2 mm to give 71.4 g purified I and 106.3 g high-boiling mixture Nuray (32 g) was recovered, and high-boiling isocyanates (74 g) were recycled to the distillation apparatus with 75.7
g addnl. crude I to give 121 g purified I and recover 31 g Nuray and 29 g high-boiling isocyanates without forming deposits on the apparatus

=> d l8 4-14 ti

L8 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Low-refractive-index urethane (meth)acrylate compositions and optical fiber claddings therefrom

L8 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI polyisocyanate mixtures as curing agents for high-solids coating compositions with good appearance and impact resistance

L8 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Tackifiers with good storage stability and primer compositions using them

L8 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Preparation of lysine ester triisocyanates without discoloration

L8 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Moisture-curable urethane compositions with low foaming and good adhesion to substrate surface without the needs for a primer

L8 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI (Hydroxyalkyl)cyclohexane group-containing (meth)acrylate copolymers and their compositions giving scratch-resistant self-repairable hard coatings

L8 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Polyisocyanates, their compositions, and fast-drying polyurethane coatings

L8 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Moisture-curable one-component urethane polymer compositions with good adhesion to mortar and aluminum products

L8 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI One-liquid moisture-curable polyurethane compositions with good adhesion and curability

L8 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Preparation of active hydrogen compounds-modified polyisocyanates

L8 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Manufacture of polymer boards with uniform composition distribution by casting

=> d l8 6,7,10,13 ti fbib abs

L8 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Tackifiers with good storage stability and primer compositions using them
AN 2002:129269 CAPLUS
DN 136:185441
TI Tackifiers with good storage stability and primer compositions using them
IN Miyata, Akihiro; Ishikawa, Kazunori; Matsuda, Hideyuki
PA Yokohama Rubber Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002053798	A2	20020219	JP 2000-239446	20000808
	US 2002037964	A1	20020328	US 2001-920712	20010803
	US 6765055	B2	20040720		
				JP 2000-239446 A	20000808

AB Title tackifiers comprise silanes having ≥1 (average) NCO groups and ≥1 (average) hydrolyzable alkoxysilyl groups and are prepared from (A) polyisocyanates and (B) silane coupling agents having secondary amino groups containing N atoms bonded to Ph or its derivs. directly. The primer compns. contain the tackifiers and film-forming polymers. Thus, a composition containing a reaction product of hexamethylene diisocyanate and γ-anilinopropyltrimethoxysilane and Gemlac YC 3623 (acrylic polymer) was applied on a float glass sheet to give a test piece showing good water-resistant and low-temperature adhesion.

L8 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Preparation of lysine ester triisocyanates without discoloration
AN 2002:23511 CAPLUS

DN 136:69598
TI Preparation of lysine ester triisocyanates without discoloration
IN Matsuoka, Toshihiro; Kato, Shigeaki; Matsushita, Seishiro; Fukuda, Yukitoshi
PA Kyowa Oil and Fat Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002003462	A2	20020109	JP 2000-183940	20000620
				JP 2000-183940	20000620

OS CASREACT 136:69598; MARPAT 136:69598
AB The compds. OCN(CH2)4CH(NCO)CO2RNCO (R = alkyl) are prepared by reaction of H2N(CH2)4CH(NH2)CO2RNH2 (R = alkylene) or their salts with phosgene, treatment of the reaction mixture with activated C or metal halides, and distillation Lysine β-aminoethyl ester trihydrochloride was reacted with phosgene in o-dichlorobenzene at 130° for 12 h, treated with activated C (Shirasagi P), and distilled to give lysine diisocyanate β-isocyanatoethyl ester with 99% purity and APHA 20.

L8 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Polyisocyanates, their compositions, and fast-drying polyurethane coatings
AN 2000:765421 CAPLUS
DN 133:336624
TI Polyisocyanates, their compositions, and fast-drying polyurethane coatings
IN Kaminaga, Hiroshi; Komiyama, Kenji; Tanaka, Kazuaki; Nobuhara, Toshikazu
PA Saito K. K., Japan; Kyowa Hakko Kogyo Co., Ltd.; Nippon Soda Co., Ltd.
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000302745	A2	20001031	JP 1999-223770	19990806
				JP 1999-36534 A	19990215

OS MARPAT 133:336624
AB Polyisocyanates are prepared by reaction of lysine triisocyanate (I) with H2O. Thus, I was reacted with H2O in acetone-MEK-cellosolve acetate mixture to give a biuret product containing 28.9% NCO, which was mixed with acrylic polyol (Hitaloid D 1004) with NCO:OH ratio of 1:1, and applied on a substrate to give coatings showing pencil hardness H after 1 day at room temperature and color difference (ΔE) 0.81 after 60 h exposure to sunshine weather-O-meter.

L8 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Preparation of active hydrogen compounds-modified polyisocyanates
AN 1998:211135 CAPLUS
DN 128:257181
TI Preparation of active hydrogen compounds-modified polyisocyanates
IN Nomura, Satoshi; Gonjo, Hidenori; Furumaki, Kazunari
PA Toray Industries, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10087597	A2	19980407	JP 1996-242193	19960912

JP 1996-242193 19960912

AB The title compds. are prepared by treatment of polyisocyanates with active H-containing compds. in the presence of alkali metals, alkaline earth metals, and/or their compds. at ≤1 ppm. This method is useful in modification of polyisocyanates with ≥2 compds. without causing dimerization or trimerization of the isocyanates. Lysine triisocyanate was treated with 2-hydroxyethyl methacrylate and K-containing OH-modified poly(dimethylsiloxane), then mixed with trifluoroethyl methacrylate to give a transparent solution

```
=> isocyanate
         63312 ISOCYANATE
         21381 ISOCYANATES
L11      71650 ISOCYANATE
                (ISOCYANATE OR ISOCYANATES)

=> d his

     (FILE 'HOME' ENTERED AT 07:39:58 ON 15 MAR 2006)

     FILE 'REGISTRY' ENTERED AT 07:40:09 ON 15 MAR 2006
               E LYSINE TRIISOCYANATE/CN
L1             1 E3

     FILE 'CAPLUS' ENTERED AT 07:42:27 ON 15 MAR 2006
L2            28 L1
                 SAVE TEMP L2 LYSTRIISO/A
L3       1186698 CARBON
L4             3 L2 AND L3
L5             0 ACTIVATRED CARBON
L6         45301 SEARCH ACTIVATED CARBON
L7             0 L2 AND L6
L8            18 L1/PREP
L9         12991 PHOSGENE
L10            2 L8 AND L9
L11        71650 ISOCYANATE

=> 16(l)l11
L12           25 L6(L)L11

=> d l12 15-25 ti

L12  ANSWER 15 OF 25  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Determining VOC adsorption capacity

L12  ANSWER 16 OF 25  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Preparation of carbonate esters

L12  ANSWER 17 OF 25  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Asphalt-polyurethane sealant

L12  ANSWER 18 OF 25  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Adsorptive removal of isocyanates from waste gases

L12  ANSWER 19 OF 25  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Bearing linings

L12  ANSWER 20 OF 25  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Organic and inorganic composite foams

L12  ANSWER 21 OF 25  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Polyisocyanates from polycarbamates
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L12 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2006 ACS on STN
TI Selective adsorbents useful as dialysis membrane substitutes

L12 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2006 ACS on STN
TI Cross-linking agents for polymers containing halogen

L12 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2006 ACS on STN
TI Polyurethan elastomers having increased pot life

L12 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2006 ACS on STN
TI Polyurethan manufacture

=> purif?
L13 792841 PURIF?

=> l12(l)l13
L14 2 L12(L)L13

=> d l14 1-2 ti

L14 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
TI Apparatus for recirculation and purification bathtub water using activated carbon and sodium dichloroisocyanate

L14 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
TI Polyurethan manufacture

=> d l14 1-2 ti fbib abs

L14 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
TI Apparatus for recirculation and purification bathtub water using activated carbon and sodium dichloroisocyanate
AN 1999:480894 CAPLUS
DN 131:106564
TI Apparatus for recirculation and purification bathtub water using activated carbon and sodium dichloroisocyanate
IN Takahashi, Mitsutaka; Nakatsugawa, Naoki; Fukuda, Masahiko; Okajima, Rumi; Morikawa, Akira
PA Mitsubishi Electric Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11207360	A2	19990803	JP 1998-16724	19980129
				JP 1998-16724	19980129

AB The apparatus includes a recirculation loop with a purification tank filled with activated carbon having surface area 6x105-2x106 m2, and a means for releasing sodium dichloroisocyanate as purification agent into the water, at a ratio of surface area to releasing amount being (1.1-4.5)x106 m2/g, for disinfection.

L14 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
TI Polyurethan manufacture
AN 1966:105433 CAPLUS
DN 64:105433
OREF 64:19928b-f

TI Polyurethan manufacture
IN Aitken, Roxburgh R.; Green, William
PA Imperial Chemical Industries Ltd.
SO 7 pp.
DT Patent
LA Unavailable
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 1025242		19660406	GB	19621102

AB Polyurethans which are relatively unaffected by high humidity and which are suitable for manufacture of foams having a high resistance to compression are prepared by treating an OH-containing block copolymer of ethylene and 1,2-propylene oxides, having an oxyethylene content of 0.1-7% by weight, with a polyisocyanate. The latter may be either a product obtained by treating tolylene diisocyanate with less than a stoichiometric equivalent of at least one polyol having a mol. weight ≤1000, or alternatively a composition comprising a major proportion of a diarylmethane diisocyanate and from 5 to 50% by weight of a polyisocyanate with a functionality >2. Suitable diarylmethane diisocyanates are diphenylmethane diisocyanate and phenyltolylmethane diisocyanate. A polyisocyanate with a functionality >2 may be directly added to the diarylmethane diisocyanate or such a compound may be prepared by treating the latter with a polyol or by partially polymerizing the latter or as by products of the manufacture of diarylmethane diisocyanate by phosgenation of diaryldiaminomethane. Thus, a block copolymer is obtained by first polymerizing propylene oxide to a mol. weight 4750 at 45-55 psig. at 125° in the presence of glycerol and KOH. Ethylene oxide (200 parts) is then added and the mixture is heated to 100-10° under the autogeneous pressure generated. The crude product is **purified** by heating and stirring at 20 mm. for 1 hr. followed by neutralization with adipic acid in the presence of Filtecel, **activated carbon**, and 2-(α-methylcyclohexyl)-4,6-dimethylphenol. The product has an OH value of 33.3 mg. KOH/g., a water content of 0.06%, and an acid value of 0.11 mg. KOH/g., and contains 5% ethylene oxide residues. A polyisocyanate is prepared by treating 4.5 equivalent (based on combined OH and acid values of polyester) of 80:20 2,4- and 2,6-tolylene diisocyanate with a polyester of OH value 650 mg. KOH/g. and acid value <2 mg. KOH/g. obtained by condensing 8 moles of trimethylolpropane, 1 mole of pentaerythritol, and 4 moles adipic acid. The product contains 30% by weight of free **isocyanate** groups. Foams are obtained by treating the block copolymer with the **isocyanate**.

=> d his

(FILE 'HOME' ENTERED AT 07:39:58 ON 15 MAR 2006)

FILE 'REGISTRY' ENTERED AT 07:40:09 ON 15 MAR 2006
E LYSINE TRIISOCYANATE/CN
L1 1 E3

FILE 'CAPLUS' ENTERED AT 07:42:27 ON 15 MAR 2006
L2 28 L1
SAVE TEMP L2 LYSTRIISO/A
L3 1186698 CARBON
L4 3 L2 AND L3
L5 0 ACTIVATRED CARBON
L6 45301 SEARCH ACTIVATED CARBON
L7 0 L2 AND L6
L8 18 L1/PREP
L9 12991 PHOSGENE
L10 2 L8 AND L9

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L11        71650 ISOCYANATE
L12           25 L6(L)L11
L13       792841 PURIF?
L14            2 L12(L)L13

=> l6 and l11
L15           45 L6 AND L11

=> l13 and l15
L16            8 L13 AND L15

=> d l16 1-8 ti

L16  ANSWER 1 OF 8  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Use of starch, including modified and insoluble starch, for the
     elimination of natural organic substances from liquids

L16  ANSWER 2 OF 8  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Copolyether and process for production thereof

L16  ANSWER 3 OF 8  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Preparation of polycyclodextrin as water purification adsorbent

L16  ANSWER 4 OF 8  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Functional Dendrimeric "Nanosponges" for the Removal of Polycyclic
     Aromatic Hydrocarbons from Water

L16  ANSWER 5 OF 8  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Apparatus for recirculation and purification bathtub water using
     activated carbon and sodium dichloroisocyanate

L16  ANSWER 6 OF 8  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Separating isocyanates from gases and vapors

L16  ANSWER 7 OF 8  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Polyurethan elastomers having increased pot life

L16  ANSWER 8 OF 8  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Polyurethan manufacture


=> d l16n6-8 ti fbib abs
'L16N6-8' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
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SCAN must be entered on the same line as the DISPLAY,
e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):end

=> d l16 6-8 ti fbib abs

L16 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
TI Separating **isocyanates** from gases and vapors
AN 1977:33691 CAPLUS
DN 86:33691
TI Separating **isocyanates** from gases and vapors
IN Maegerlein, Helmut; Meyer, Gerhard; Rupp, Hans D.; Klug, Walter
PA Akzo G.m.b.H., Fed. Rep. Ger.
SO Ger. Offen., 16 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	DE 2436781	A1	19760212	DE 1974-2436781	A	19740731
	FR 2280418	A1	19760227	FR 1975-22589		19750718
				DE 1974-2436781	A	19740731

JP 51040373 A2 19760405 JP 1975-93679 19750731
DE 1974-2436781 A 19740731

AB Mono- and/or diisocyanates are removed from gases, without formation of insol. ureas, by hydrolysis with dilute aqueous alkalies or mineral acids in the presence of active charcoal and/or Al2O3. Thus, offgas containing 1500 mg/m3 hexamethylene diisocyanate (I) [822-06-0] and 13 g/m3 toluene [108-88-3] is passed at 20 cm/s with 100 ml/h 5.0% H2SO4 at 20° into a 200 mm long, 25 mm inside diameter vertical tower packed with activated charcoal (Supersorbon SW4, particle size 4 mm, bulk d. 0.4) for 240 hr, giving an effluent containing 0.045 mg/m3 I.

L16 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
TI Polyurethan elastomers having increased pot life
AN 1967:38692 CAPLUS
DN 66:38692
TI Polyurethan elastomers having increased pot life
PA Dainippon Ink and Chemicals, Inc.
SO Brit., 6 pp.
CODEN: BRXXAA
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 1050275		19661207	GB	
			JP	19630305
DE 1495502			DE	

AB Polyurethan elastomers prepared from ε-caprolactone (I) are treated with an ion-exchange resin or similar material prior to treatment of the polyester with a diisocyanate and a diamine. For example, 684 g. unsubstituted I was polymerized by heating for 6 hrs. in N in the presence of 46.5 g. CH2OHCH2OH initiator and BF3.Et2O catalyst. After dissolving the resulting polymer in 800 g. PhMe, neutralizing by addition of 30 g. of 26% NH4OH, and washing with H2O, treatment was effected at room temperature by adding 100 g. of Diaion SA-100 (anion-exchange resin). The polymeric solution was passed through 100 g. of Dowex 50 (cation-exchange resin) followed by concentration under reduced pressure at 100° to obtain a light-yellow, waxlike polyester having an OH value 102.2, a carboxyl value 2.5, and m.p. 52°. To 210.8 g. of this polyester, 73 g. toluene diisocyanate (II) was added at 80°, the reaction being stopped when no further decrease in the **isocyanate** radical content of the reaction mixture could be observed. Then, 100 g. of the resulting polyester-polyurethan diisocyanate was subjected for 30 min. to a reduced-pressure defoaming operation at 3-5 mm. and 90°, after which 15 g. 3,3'-dichloro-4,4'-bisphenylenediamine was added at 80° and the mixture stirred. The mixture was cast between 2 sheets of glass and hardened for 5 hrs. at 130°. The pot life was 4 min. and 15 sec., the tensile strength 450 kg./cm.2, elongation 420%, tear strength 90 kg./cm., brittle temperature <70°, Shore A hardness 92. If 0.25 g. PCl3 is added along with II in the above example, the pot life is extended to 10 min. and 50 sec. while the rest of the phys. consts. are unaffected. Instead of Diaion SA-100, an ion-exchange membrane, activated clay, Al2O3, silica gel, or **activated carbon** may be used. Instead of PH3, p-MeC6H4SO2Cl, PBr3, POCl3, SOCl2, or SO2Cl2 may be used.

L16 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
TI Polyurethan manufacture
AN 1966:105433 CAPLUS
DN 64:105433
OREF 64:19928b-f
TI Polyurethan manufacture
IN Aitken, Roxburgh R.; Green, William

PA Imperial Chemical Industries Ltd.
SO 7 pp.
DT Patent
LA Unavailable
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 1025242		19660406	GB	19621102

AB Polyurethans which are relatively unaffected by high humidity and which are suitable for manufacture of foams having a high resistance to compression are prepared by treating an OH-containing block copolymer of ethylene and 1,2-propylene oxides, having an oxyethylene content of 0.1-7% by weight, with a polyisocyanate. The latter may be either a product obtained by treating tolylene diisocyanate with less than a stoichiometric equivalent of at least one polyol having a mol. weight ≤1000, or alternatively a composition comprising a major proportion of a diarylmethane diisocyanate and from 5 to 50% by weight of a polyisocyanate with a functionality >2. Suitable diarylmethane diisocyanates are diphenylmethane diisocyanate and phenyltolylmethane diisocyanate. A polyisocyanate with a functionality >2 may be directly added to the diarylmethane diisocyanate or such a compound may be prepared by treating the latter with a polyol or by partially polymerizing the latter or as by products of the manufacture of diarylmethane diisocyanate by phosgenation of diaryldiaminomethane. Thus, a block copolymer is obtained by first polymerizing propylene oxide to a mol. weight 4750 at 45-55 psig. at 125° in the presence of glycerol and KOH. Ethylene oxide (200 parts) is then added and the mixture is heated to 100-10° under the autogeneous pressure generated. The crude product is **purified** by heating and stirring at 20 mm. for 1 hr. followed by neutralization with adipic acid in the presence of Filtecel, **activated carbon**, and 2-(α-methylcyclohexyl)-4,6-dimethylphenol. The product has an OH value of 33.3 mg. KOH/g., a water content of 0.06%, and an acid value of 0.11 mg. KOH/g., and contains 5% ethylene oxide residues. A polyisocyanate is prepared by treating 4.5 equivalent (based on combined OH and acid values of polyester) of 80:20 2,4- and 2,6-tolylene diisocyanate with a polyester of OH value 650 mg. KOH/g. and acid value <2 mg. KOH/g. obtained by condensing 8 moles of trimethylolpropane, 1 mole of pentaerythritol, and 4 moles adipic acid. The product contains 30% by weight of free **isocyanate** groups. Foams are obtained by treating the block copolymer with the **isocyanate**.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	93.58	102.21

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-12.00	-12.00

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 08:56:24 ON 15 MAR 2006